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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,940	11/29/2001	Holger Nolte	CRR0001	8873
7590 11/02/2004 KENNETH J. SHEEHAN, BAKER & HOSTETLER LLP WASHINGTON SQUARE, SUITE 1100 1050 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036-5304			EXAMINER BAYERL, RAYMOND J	
			ART UNIT 2173	PAPER NUMBER

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/001,940

Applicant(s)

NOLTE ET AL.

Examiner

Raymond J. Bayerl

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2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) *  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4, 8, 10, 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 4, "the frame buffer" appears without clear antecedent basis in the preceding recitation. It is only in non-parent claim 3 that "a frame buffer" is first recited. Please note a similar difficulty in claim 15.

Claims 8 and 10 are identical. It is not clear what applicant's intent is in presenting such a pair of claims; was a difference in fact intended, as in the similar pair of "metadata" claims 19, 21?

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of

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35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1 – 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamura et al. ("Iwamura"; US #5,945,976) in view of Montgomery et al. ("Montgomery"; US #5,696,533).

As per independent claim 1's "graphical user interface" in which "a rendered image of at least one graphical object" appears "on a display device", Iwamura's GRAPHIC DATA PROCESSING SYSTEM produces scene data by which a three-dimensional scene image is generated and displayed (Abstract). Please note such displays as Iwamura's figs 14A, 14B, in which "graphical object" depictions appear in a "graphical user interface".

While some form of "pixel" graphics *per se* is necessarily involved in Iwamura, Iwamura does not extend to teaching "a color value stored for each pixel" along with "object identification data stored with each pixel covered by the rendered image", whereby this "identifies the graphical object located at the pixel", though Iwamura's indication cursor appears to call up an "object" through some procedure.

However, Montgomery's METHOD FOR SELECTING AN ITEM ON A GRAPHICS SCREEN is one in which an item buffer is used to assign a unique item identifier to members of a graphics object list (Abstract). The explicit teachings of Montgomery in this regard appear in fig 2, where an item buf with item num entries is run in parallel with a frame buf containing color values.

Thus, it would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to use the item buffer technique of Montgomery to assign "identification data" to the scene image objects of Iwamura. The motivation is to provide the Iwamura user with a direct indexing to the identities of the contents of the scene image.

Claim 2's "three-dimensional image comprising at least two graphical objects that are co-located" (see also claims 12, 23, 30) is seen in Iwamura, where one building appears behind another in fig 14A. Using the Montgomery item buffer, only the "visible graphic object" will obtain the value for that object in memory. A similar line of reasoning applies to claim 13.

The "writing" (claims 3, 14, 25) and "reading" (claims 4, 15) of "frame buffer" data occurs in Montgomery (thus "describing how each graphical element is to be displayed" along with an "object identification value" in a parallel "frame buffer" (see claim 26)), and the use of a "cursor pointing to a particular coordinate" (claims 5, 16) is part of both Iwamura, with the indication cursor and Montgomery, with a pointer device. In the combination of references, "reading the object identification data" (claims 6, 17, 27, 31) takes place in Montgomery, to supply "object identification data" for Iwamura's scene.

Claim 7's "exporting the object identification information" (see also claim 18) is seen in Iwamura, where such "metadata information" (claims 8, 10, 19, 28, 32) as appears in the region 1207 or 1303 (fig 15A) is provided. This data is made part of an "object-identification value indexed data structure" (claims 9, 20), when the Montgomery item buffer values are used to call such data from

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Iwamura's store. See also claim 21, in which "a metadata information display object" reads upon Iwamura's supplemental scene display.

Independent claim 11's "rendering an image of a plurality of graphical objects" reads upon Iwamura, for reasons similar to those given above for claim 1, and the use of "a color value" and "object identification data for each of the specified locations" is then suggested by the combination with Montgomery. A similar line of reasoning applies to independent claims 22, 33.

Independent claim 24's "associating a unique object identification value with each graphical element" is suggested by Montgomery, when applied to the "graphical element" composition of Iwamura's scene. There, the "data structure" behind the supplemental displays will add metadata to the item num listings in Montgomery. A similar line of reasoning applies to independent claim 29.

The "computerized system" in claim 34, with its "pixels" that have "a unique object identification (ID) value" reads upon Montgomery, as noted above. The "rendering process" that determines "visible surfaces", as also discussed above, is seen in Iwamura. Montgomery then provides a "pixel map" to accomplish "object identification" of those objects that are Iwamura-rendered.

The use of "a pointer" in relation to "at least one graphical object" (independent claim 35) is found in Iwamura, and the "frame buffer" whose "first field" is "for holding display information" and whose "second field" is "for holding object identification information" is suggested by Montgomery.

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The "frame buffer" of independent claim 36 is largely suggested by the "pixel" "memory locations" of Montgomery, which can be used in combination with the display of "a unique software graphical object" as per Iwamura.


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The remaining US Patent documents made of record (see attached form PTO-892) relate to producing displays of identifiable objects.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond J. Bayerl whose telephone number is (703) 305-9789 through the month of October 2004 and (571) 272-4045 thereafter. The examiner can normally be reached on M - F from 10:00 AM to 5:00 PM ET.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached on (703) 308-3116 through the month of October 2004 and (571) 272-4048 thereafter. All patent application related correspondence transmitted by FAX **must be directed** to the central FAX number (703) 872-9306.

9. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
RAYMOND J. BAYERL  
PRIMARY EXAMINER  
ART UNIT 2173

19 October 2004